

CLAIMS

1. An antibody which has sufficient of the amino acid sequence of each CDR shown below such that the antibody is capable of binding to the CD23 (FC ϵ RII) type II molecule expressed on haematopoietic cells:

RSSKSLLY KDGKTYLN CDR1 (SEQ ID NO: 3)

LMSTRAS CDR2 (SEQ ID NO: 5)

QQLVEYPFT CDR3 (SEQ ID NO: 7)

GYWMS CDRH1 (SEQ ID NO: 9)

EIRLKSDNYATHYAESVKG CDRH2 (SEQ ID NO: 11)

FID..... CDRH3 (SEQ ID NO: 13)

2. An antibody which binds to the CD23 (FC ϵ RII) type II molecule expressed on haematopoietic cells or soluble CD23 characterised by an affinity constant equal to or greater than 1×10^9 Ka Mo l^{-1} .

3. An antibody which competitively inhibits the binding of an antibody having the CDR sequences set out in claim 1, to the CD23 (FC ϵ RII) type II molecule expressed on haematopoietic cells.

4. An antibody according to ^{claim 1} ~~any of the preceding claims~~ which is an altered antibody.

5. An antibody according to claim 4 which is a humanised antibody.

6. An antibody according to ^{claim 1} ~~any of the preceding claims~~ in which the framework of the heavy chain includes the amino acid residues from the murine antibody at any of positions 49,66,76,77 and 94.

7. An antibody according to ^{claim 1} ~~any of the preceding claims~~ in which the framework of the light chain included the amino acid residues from them murine antibody at position 64.

8. An antibody comprising one or both of the amino acid sequences according to SEQ ID NOS: 1 and 2.
9. An antibody comprising one or both of the amino acid sequences according to SEQ ID NOS: 17 and 18.
- aa 10. An antibody according to ^{claim 1} ~~any of the preceding claims~~ in which the constant region contains Ala at position 235 and Ala at position 237 by the Kabat numbering system.
- 10 11. An antibody according to ~~any of the preceding claims~~ for use in human therapy.
- aa 12. Use of an antibody according to ^{claim 1} ~~any of claims 1-10~~ in the manufacture of a medicament for the treatment of a disorder selected from arthritis, lupus erythematosus, Hashimotos thyroiditis, multiple sclerosis, diabetes, uveitis, dermatitis, psoriasis, urticaria, nephrotic syndrome, glomerulonephritis, inflammatory bowel disease, ulcerative colitis, Crohn's disease, Sjogren's syndrome, allergies, allergic asthma, intrinsic asthma, acute asthmatic exacerbation, rhinitis, eczema, GVH, COPD, insulinitis, bronchitis (particularly chronic bronchitis) or diabetes (particularly Type 1 diabetes), B-cell malignancies.
- 20 13. Use of an antibody which binds to the CD23 (FC ϵ RII) type II molecule expressed on haematopoietic cells in the manufacture of a medicament for blocking soluble CD23 formation.
- 25 14. Use of antibody according to claim 13 wherein the antibody is an antibody according to ^{claim 1} ~~any one of claims 1-10~~.
- aa 30 15. A DNA sequence encoding an antibody chain which comprises one or more of the sequences according to:
- 35 CDRL1 base pair numbers 70-117 of Figure 3 (SEQ ID NOS: 4)
CDRL2 base pair numbers 163-183 of Figure 3 (SEQ ID NOS: 6)

CDRL3 base pair numbers 280-306 of Figure 3 (SEQ ID NOS: 8)

CDRH1 base pair numbers 91-105 of Figure 4 (SEQ ID NOS: 10)

CDRH2 base pair numbers 148-204 of Figure 4 (SEQ ID NOS: 12)

5 CDRH3 base pair numbers 301-309 of Figure 4 (SEQ ID NOS: 14)

16. DNA sequence encoding an antibody chain which comprises one or both of the sequences encoding of the sequences according to SEQ ID NOS: 1 and 2.

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17. A DNA sequence encoding an antibody chain which comprises one or both of the sequences according to SEQ ID NOS: 17 and 18

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aa 18. A pharmaceutical formulation comprising an antibody as defined in ^{*claim*} ~~any of the claims 1 to 10~~ and a pharmaceutically acceptable excipient.

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aa 19. A pharmaceutical formulation comprising an antibody as defined in ^{*claim*} ~~any of claims 1 to 10~~ in combination with an immunomodulatory or anti-inflammatory agent and a pharmaceutically acceptable excipient.